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ATTORNEY DOCKET NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE E 06/09/00 CHARRIERE 004900-172 09/485,533 **EXAMINER** IM52/1001 SERGENT, R BURNS DOANE SWECKER & MATHIS PAPER NUMBER ART UNIT PO BOX 1404 ALEXANDRIA VA 22313-1404 1711 DATE MAILED: 10/01/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Application No.

Applicant(s) 09/485,533

Charriere et al.

Office Action Summary

Examiner

Rabon Sergent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on _____ 2b) X This action is non-final. 2a) This action is FINAL. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims is/are pending in the application. 4) X Claim(s) 39-76 4a) Of the above, claim(s) ______ is/are withdrawn from consideration. is/are allowed. 5) Claim(s) _____ 6) X Claim(s) 39-76 is/are rejected. is/are objected to. 7) Claim(s) ______ are subject to restriction and/or election requirement. 8) Claims ___ **Application Papers** 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on ______ is/are objected to by the Examiner. 11) ☐ The proposed drawing correction filed on ______ is: a) ☐ approved b) ☐ disapproved. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a)

All b)

Some* c)

None of: 1. \square Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. __ 3. X Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) 18) Interview Summary (PTO-413) Paper No(s). 15) Notice of References Cited (PTO-892) 19) Notice of Informal Patent Application (PTO-152) 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 17) X Information Disclosure Statement(s) (PTO-1449) Paper No(s). ____1 20) Other:

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- This application does not contain an abstract of the disclosure as required by 37
 CFR 1.72(b). An abstract on a separate sheet is required.
- 2. Claims 39-76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Within claims 39, 48-54, 57-60, 64, and 65, the language, "low viscosity", is subjective language. It cannot be determined what constitutes a low viscosity. Further, since viscosities are highly temperature sensitive, it is unclear that the language provides any meaningful limitation to the claims.

Within claims 39, 59, and 60, the language, "said isocyanates monomeres", is improper.

The process of claim 47 is unclear. If the dimerization reaction has occurred, it is unclear how the monomers can be recycled into the finished reaction. Applicants should clarify if the process is continuous or batch.

Within claim 48, "uretidinedione" has been misspelled.

Within claims 48-51, it is unclear how trimer compounds can be satisfied by compounds containing biuret groups. Furthermore, it is unclear what catalysts and conditions are encompassed or excluded by "(cyclo)condensation".

Within claims 52-54, the reference within line 3 of each claim to "at least one other compound" is confusing. It is unclear if the "compound" is present with the dimer compound as a

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mixture or if the dimer compound has reacted with the "compound" to yield a derivative.

According to the process steps, the "compound" appears to react; however, the initial language of the claims seems to allow for mixtures. The claims are not clear as to what are the actual products of the processes.

Within claims 52, 53, 54, 60, 62, 66, 69, and 70, the language, "where appropriate", renders the claims indefinite. It is unclear how one determines when it is "appropriate". What criteria are required?

Within the last lines of claims 53 and 54, it is unclear where the trimer comes from. No trimerization steps have been specified within the claims.

Within claims 59, 70, and 72, the use of the suffix, "-based", renders the claims indefinite, because it is unclear to what extent the groups are based on or derived from hydrocarbons.

Within claim 59, the language, "can be" and "can bear", renders the claims indefinite, because it is unclear if or to what extent the language denoted by "can be" or "can bear" is optional.

Within claim 62, the language, "the compounds of general formula II and III", lacks antecedence from claim 59. It appears that the claim's dependency may be incorrect.

Within claims 64, 65, 74, and 75, no basis has been specified for the claimed weight percents. Also, within claim 75, the type of percent (i.e., weight) has not been specified.

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Within claims 66, 74, and 75, the use of the word, "type", so extends the scope of the term in question that it is rendered indefinite. It cannot be determined what species are encompassed or excluded by the language.

Within claim 75, the temperature condition must be specified for the viscosity, in order for the limitation to be meaningful.

Within claims 66 and 68, the use of the "and", "and/or", and "optionally" language causes the claims to be ambiguous, because it is unclear with respect to what combinations of species fall within the scope of the claim.

Within claim 72, the value of "n" is indefinite, because it has been defined using two different ranges and it has been used to further define different groups.

Within claims 73-75, it is unclear what is meant by the language, "for simultaneous or successive application".

Within claim 74, the language denoted by "advantageously" renders the claims indefinite, because it cannot be determined if or to what extent the advantageous language is to further limit the less advantageous language.

Within claim 67, both structures are incorrect.

Within claim 70, the language and structure of the claim is such that the subject matter is virtually incomprehensible. It cannot be determined with any certainty what applicants are

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attempting to define or how the definitions are to be interpreted in view of the definitions within the claim from which claim 70 depends.

Within claims 60, 62, 66, 69, and 70, the language, "with the OH groups substituted", lacks antecedence. It is unclear what OH groups are being referred to.

Within claims 60, 66, 69, and 70, the variable "R" has not been defined. Independent claims cannot rely on definitions from other claims.

Within claim 69, it is unclear what is being defined within the last three lines of the claim. It appears that these variables have already been defined. Furthermore, a bond is missing from structure (V). Also, the variables R_1 , X_1 , X_2 , and X_3 do not appear in any structure. R_2 has not been defined.

Within claim 66, structure (II) has not been labeled, and the biuret compound of formula (IV) is not a compound, rather it is a group. Furthermore, the language "-R'-N=C=O as defined above", is improper, because it has not been defined above. Also, it is unclear why "as defined above" appears within the third line from the bottom of page 15.

Within claim 62, it appears that R_1 and R_2 have multiple definitions. This is ambiguous and improper.

Within claim 60, the variable, $NX'_1X''_1$ does not appear within structure (III). Within claims 60, 62, and 69, the structure of the group, NX_1 -silyl, is unclear.

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Within claims 60, 62, 66, 67, 69, and 70, the definition of R', as it pertains to many of the

structures, is improper, because the definition of R' is linked to the definition of variable p;

however, several occurrences of R' are not associated with variable p. Furthermore, R' should be

p-valent + 1; otherwise, no provision for the linking bond to R' is provided.

If, in response to this rejection, applicants amend the claims, then applicants are required

to indicate where support exists for each amendment.

3. Claims 39-76 are rejected under 35 U.S.C. 112, first paragraph, as containing subject

matter which was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had possession

of the claimed invention.

Applicants have failed to provide an adequate definition for the term, "low viscosity".

Any inquiry concerning this communication should be directed to R. Sergent at telephone

number (703) 308-2982.

RABON SERGENT RIMARY EXAMINES

R. Sergent

September 30, 2001